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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,526	07/28/2006	Mark Thomas Johnson	NL040073	2339

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EXAMINER	
HICKS, CHARLES V	
ART UNIT	**PAPER NUMBER**
2629	
MAIL DATE	**DELIVERY MODE**
08/07/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/597,526	JOHNSON ET AL.	
	Examiner	Art Unit	
	CHARLES HICKS	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 July 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 July 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 5 recites the limitations I, II, G2-B, G1-B, B-B, and W-B. There is insufficient antecedent basis for these limitations in the claim. For the purposes of this examination, I and II will be interpreted as schemes for resetting to white and black, respectively; G2-B, G1-B, and B-B will be interpreted as transitions from dark grey to black, light grey to black, and black to black, respectively; and W-B will be interpreted as a transition from white to black.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 10 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. A computer program is neither a computer component nor a statutory process, as it is not an “act” or “acts” being performed nor does it define any structural and functional interrelationships between the computer

program and other elements of a computer, which permit the computer program's functionality to be realized.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Zehner et al. (US 2003/0137521).

In reference to claim 1, Zehner teaches an electrophoretic display panel comprising: an electrophoretic medium comprising charged particles (Zehner, pg. 1, par. 2);

a plurality of picture elements (Zehner, pg. 1, par. 2);

electrodes associated with each picture element for receiving a potential difference (Zehner, pg. 4, par. 49);

the charged particles being able to occupy extreme positions near the electrodes and intermediate positions in between the electrodes (Zehner, pg. 1, par. 5; pg. 2. par. 17);

the extreme positions being associated with extreme optical states (Zehner, pg. 1, par, 5);

and drive means, the drive means being arranged for providing to each picture element a reset potential difference for causing particles to substantially occupy one of the extreme positions, and subsequently a grey scale potential difference for causing the particles to occupy the position corresponding to the image information, characterized in that the drive means are arranged for providing an over-reset potential difference prior to the application of the gray scale potential difference for over-resetting a picture element from an optical state to one of the extreme optical states (Zehner, pg. 14, par. 150);

wherein the plurality of picture elements comprises two or more interspersed groups of picture elements, and in that the drive means are arranged for providing each group with its own application scheme of overreset potential differences (Zehner, pg. 17, par. 173),

the application schemes for overreset potential differences differing from group to group in such manner that the time period during which an overreset condition is maintained differs between said groups for at least some transitions of a picture element from an initial optical state to a final optical state via an extreme optical state (Zehner, pg. 17, par. 174).

Claim 2 is rejected as being dependent on rejected claim 1 as discussed above and further, Zehner teaches wherein the drive means are arranged to provide overreset potential differences such that the application schemes for application of the overreset signals alternate between groups between frames (Zehner, pg. 17, par. 174).

Claim 3 is rejected as being dependent on rejected claim 1 as discussed above and further, Zehner teaches wherein the drive means are arranged to supply each group of picture element with its own overreset potential difference, the application schemes for overreset potential differences differing from group to group only by a time difference (Zehner, pg. 17, par. 173,174).

Claim 4 is rejected as being dependent on rejected claim 1 as discussed above and further, Zehner teaches wherein the drive means are arranged to supply each group with its own overreset signals, the application schemes for overreset signals differing from group to group such that only a difference in the applied potential difference is established between the groups (Zehner, pg. 17, par. 173,174).

Claim 5 is rejected as being dependent on rejected claim 1 as discussed above and further, Zehner teaches wherein the drive means are arranged such that the application schemes (I, II) between groups of picture elements differ (Zehner, pg. 17, par. 174),

in that a time difference (.DELTA.') is established between groups for those transitions (G2-B, G1-B, B-B) in which the overreset potential difference is applied during less than a maximum period (Zehner, pg. 17, par. 174; pg. 7, par. 78),

but, for all groups of picture elements, application of an overreset potential difference of maximum time length (W-B) are synchronized within a maximum time

period having a common starting point (t.sub.start) and an end point (t.sub.end), and for all groups and transitions the application of overreset potential differences do not extend in time beyond said maximum time period (t.sub.start-t.sub.end) (Zehner, pg. 7, par. 78; pg. 12, par. 126).

In reference to claim 6, Zehner teaches a method for driving an electrophoretic display devices comprising a plurality of picture elements (Zehner, pg. 1, par. 2),

in which method reset potential differences are applied to picture elements of the display device, prior to application of grey scale potential differences to said picture elements (Zehner, pg. 14, par. 150),

characterized in that over-reset potential differences for over-resetting a picture element from an optical state to an extreme optical state are applied (Zehner, pg. 1, par, 5),

wherein the plurality of picture elements comprises two or more interspersed groups of picture elements, and in that each group is supplied with its own scheme of overreset potential differences (Zehner, pg. 17, par. 173, 174),

the application schemes for overreset potential differences differing from group to group in such manner that the time period at which an overreset condition is maintained differs between said groups of picture elements for at least some transitions of a picture element from an initial optical state to a final optical state via an intermediate optical state (Zehner, pg. 17, par. 174).

Claim 7 is rejected as being dependent on rejected claim 6 as discussed above and further, Zehner teaches wherein the overreset potential differences are applied such that the application schemes for application of the overreset signals alternate between groups between frames (Zehner, pg. 17, par. 174).

Claim 8 is rejected as being dependent on rejected claim 6 as discussed above and further, Zehner teaches wherein each group is supplied with its own overreset potential difference, the application schemes for overreset potential differences differing from group to group only by a time difference (.DELTA.) (Zehner, pg. 17, par. 173,174).

Claim 9 is rejected as being dependent on rejected claim 6 as discussed above and further, Zehner teaches wherein each group with its own overreset signals, the application schemes for overreset signals differing from group to group such that only a difference in the applied potential difference is established between the groups (Zehner, pg. 17, par. 173,174).

In reference to claim 10, Zehner teaches a computer program comprising program code means for performing a method in accordance with the method as claimed in claim 6 when said program is run on a computer (Zehner, pg. 7, par. 81).

In reference to claim 11, Zehner teaches a computer program product comprising program code means stored on a computer readable medium for performing a method

in accordance with the method as claimed in claim 6 when said program is run on a computer (Zehner, pg. 7, par. 81).

Claim 12 is rejected as being dependent on rejected claim 1 as discussed above and further, Zehner teaches a drive means for an electrophoretic display panel (Zehner, pg. 14, par. 150).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHARLES HICKS whose telephone number is 571-270-7535. The examiner can normally be reached on Monday-Thursday from 7:30 to 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz, can be reached on 571-272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CH

/Alexander Eisen/
Supervisory Patent Examiner, Art Unit 2629